18. (New) A search system comprising:

an obtaining device obtaining a plurality of search results for a plurality of queries in a full text search, in which text information specified by each of the plurality of queries is searched for, multi-dimensional query specification information specifying a plurality of search condition types, at least one of the search condition types including a plurality of search condition elements, and the plurality of queries specified by combinations of each of the search condition elements in each of the search condition types; and

an outputting device collectively outputting output information corresponding to the plurality of search results.

REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached Appendix is captioned **"Version with Markings to Show Changes Made."**

As a preliminary matter, Applicants added new claims 17 and 18, and submit that no new matter is being added. In particular, claims 17 and 18 are supported on page 11, lines 8-22 and page 14, line to page 15, line 20. Applicants respectfully request the Examiner's consideration of these new claims.

Claims 1-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kuechler et al. (U.S. Patent No. 4,811,199) in view of Kato et al. (U.S. Patent No.

6,0941,647). In response, Applicants amended claims 1-5 and 11-16 to more clearly recite the features of the present invention, without narrowing their scope, and respectfully traverse.

Applicants respectfully traverse because the cited references do not disclose or suggest the features of (1) specifying a plurality of *search condition combinations*, each of the combinations representing any search query which includes a plurality of search conditions for text information, as recited in claims 1, 11, 12, 14 and 15; (2) instructing *a full text search*, in which text information specified by the query specification information is searched for, as recited in claims 1, 12 and 15; and (3) obtaining a plurality of *search results* for a plurality of *search condition combinations in a full text search*, each of the combinations representing any search query which includes a plurality of search conditions for text information, and text information specified by each of the combinations being searched for in the full text search, as recited in claims 5, 13, 14 and 16.

Moreover, no suggestion or motivation can be drawn from the cited references to make the combination asserted by the Examiner, because the purpose and benefit of the cited references are different from that of the present invention. In particular, any optimization of the cited references would be directed towards achieving the purpose and benefit of the cited references, and not to achieving the purpose and benefit of the present invention. Thus, the Examiner has not shown that in order to provide an improved full text search with conditions specified by a plurality of combinations of search conditions within a single query, one of ordinary skill in the art would have been motivated to combine the cited

references to include a plurality of search condition combinations in a full text search, as recited in the claims.

The present invention allows users to *collectively* specify a plurality of search condition combinations (Applicants' specification, page 10, lines 3-5), which is distinct from search conditions or search attributes as with most conventional search systems (Applicants' specification, page 3, line 25 to page 4, line 22). In other words, with most conventional search systems, generally only one search condition combination can be issued at one time (Applicants' specification, page 3, line 35 to page 4, line 2). For example, if a search is performed for the search expression "TOKYO AND SUBWAY" during the duration from 1992 to 1998, in a typical system, the search has to be performed 7 times while changing the condition of the duration to be searched (Applicants' specification, page 4, lines 8-13). In other words, seven (7) different searches (e.g., one for each year) have to be done separately. As a result, the tedious task of inputting the search conditions for each year is imposed upon the users (Applicants' specification, page 4, lines 13-15). However, in the present invention, users can collectively specify multiple search condition combinations for a single query. Thus, the term "query specification information," as recited in the claims, is not limited to a single piece of information that is used only to specify a query, but it is used to specify a plurality of combinations of search conditions, in which each of the combinations constitutes one query. None of the cited references teach or anticipate a full text search with conditions specified by query specification information of this kind.

In contrast to the present invetion, the Kuechler et al. reference discloses a method for manipulating information in a stored information base predicated on coded maps of the attributes of an information base, referred to as topological maps. In the cited reference, the topological maps relate to the database structure (e.g., structure of the stored data), and not to the query structure (e.g., structure of the search query). Thus, the topological maps disclosed in the cited reference cannot correspond to the feature of specifying a plurality of search condition combinations, as recited in the claims, since they do not even relate to the same objects.

There are descriptions of an input device 22 that is capable of receiving information base elements, which includes one or more attributes and the corresponding values for the attributes (Col. 5, lines 50-54). However, this is simply a description of a typical query structure, specifically attributes with corresponding values. Thus, again contrary to the Examiner's assertion, the query structure disclosed in the Kuechler et al. reference is not the same as the query specification information, as recited in the claims. Applicants respectfully submit that the Kuechler et al. reference does not disclose or suggest the features, as recited in the claims. Moreover, the cited reference relates to the improvement of data structure for more effective processing, while the present invention relates to a full text search with conditions specified by a plurality of combinations of search conditions in one query. Because of these differences, there is no motivation or suggestion from the Kuechler et al. reference to make the combination, as asserted by the Examiner.
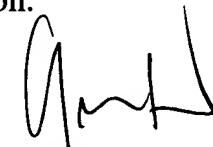
Similarly, the Kato et al. reference relates to a system for a scanning type full text search, which is a different objective from the objectives presented in the present invention. In particular, the cited reference relates to a search manner in which an input (e.g., a keyword or a key phrase) is regarded as a representation of a group of analogues, which are treated as if they are the same as the inputted keyword or key phrase. The analogues of a keyword or a key phrase include notational variations of the keyword or the key phrase, such as declensional "Kana" ending. The query resolver, which is asserted by the Examiner to correspond to the full text search recited in claims 1, 12 and 15, relates to the analogous relationships to the inputted keyword or key phrase. Thus, nothing in the cited reference even relates to the features of (1) specifying a plurality of *search condition combinations*, each of the combinations representing any search query which includes a plurality of search conditions for text information, as recited in claims 1, 11, 12, 14 and 15; (2) instructing *a full text search*, in which text information specified by the query specification information is searched for, as recited in claims 1, 12 and 15; and (3) obtaining a plurality of *search results* for a plurality of *search condition combinations in a full text search*, each of the combinations representing any search query which includes a plurality of search conditions for text information, and text information specified by each of the combinations being searched for in the full text search, as recited in claims 5, 13, 14 and 16. Moreover, since the purposes and benefits are vastly different from those of the present invention, there is simply no motivation or suggestion from the Kato et al. reference to make the combination asserted

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by the Examiner. Accordingly, for all these reasons, Applicants respectfully request that the §103 rejection of independent claims 1, 5 and 11-16 be withdrawn.

Since claims 2-4 and 6-10 depend upon either claim 1 or claim 5, they necessarily include all of the features of their associated independent claims plus other additional features. Thus, Applicants submit that the §103 rejection of claims 2-4 and 6-10 has also been overcome for the same reasons mentioned above to overcome the §103 rejection of independent claims 1 and 5. Applicants respectfully request that the §103 rejection of claims 2-4 and 6-10 also be withdrawn.

For all of the above reasons, Applicants respectfully request reconsideration and allowance of all pending claims. The Examiner should contact the undersigned attorney if an interview would expedite prosecution.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

<u>In the Claims:</u>

Claims 1-5 and 11-16 have been amended, and new claims 17-18 have been added as follows:

1.   (Amended)   A search system, comprising:

an inputting device inputting <u>query</u> specification information ~~for~~<u>which</u> collectively ~~specifying~~ <u>specifies</u> a plurality of search condition combinations, each of the combinations representing any search query which includes a plurality of search conditions <u>for text information</u>; and

an instructing device instructing a full text search<u>, in which text information specified by the query specification information is searched for</u> ~~based on the specification information~~.

2.   (Amended)   The search system according to claim 1, wherein said inputting device inputs the <u>query</u> specification information in a form of a table.

3.   (Amended)   The search system according to claim 1, further comprising<u>:</u>

a generating device automatically generating the plurality of search condition combinations based on the query specification information, wherein .

said instructing device instructs a full text search according to the plurality of search condition combinations generated by said generating device.

4. (Amended) The search system according to claim 1, further comprising:

a changing device changing a portion of search conditions included in the query specification information, wherein said instructing device instructs a selective full text search for the changed portion.

5. (Amended) A search system, comprising:

an obtaining device obtaining a plurality of search results for a plurality of search condition combinations in a full text search, each of the combinations representing any search query which includes a plurality of search conditions for text information, and text information specified by each of the combinations being searched for in the full text search; and

an outputting device collectively outputting output information corresponding to the plurality of search results.

11. (Amended) A search system~~,~~ comprising:

an inputting device inputting <u>query</u> specification information ~~for~~<u>which</u> collectively ~~specifying~~ <u>specifies</u> a plurality of search condition combinations, each of the combinations representing any search query which includes a plurality of search conditions <u>for text information</u>;

a searching device performing a full text search<u>, in which text information specified by the query specification information is searched for</u> ~~based on the specification information~~; and

an outputting device collectively outputting output information corresponding to a plurality of search results for the plurality of search condition combinations.

12. (Amended) A computer-readable storage medium on which is recorded a program for causing a computer to execute a process, said process comprising:

inputting <u>query</u> specification information ~~for~~ <u>which</u> collectively ~~specifying~~ <u>specifies</u> a plurality of search condition combinations, each of the combinations representing any search query which includes a plurality of search conditions <u>for text information</u>; and

instructing a full text search<u>, in which text information specified by the query specification information is searched for</u> ~~based on the specification information~~.

13. (Amended) A computer-readable storage medium on which is recorded a program for causing a computer to execute a process, said process comprising:

obtaining a plurality of search results for a plurality of search condition combinations in a full text search, each of the combinations representing any search query which includes a plurality of search conditions for text information, and text information specified by each of the combinations being searched for in the full text search; and

collectively outputting output information corresponding to the plurality of search results.

14. (Amended) A search method, comprising:

collectively specifying a plurality of search condition combinations in a full text search, each of the combinations representing any search query which includes a plurality of search conditions for text information;

performing an information search based on specified information;

obtaining a plurality of search results for the plurality of search condition combinations in a full text search, each of the combinations representing any search query which includes a plurality of search conditions for text information, and text information specified by each of the combinations being searched for in the full text search; and

collectively outputting output information corresponding to the plurality of search results.

15. (Amended) A search system, comprising:

inputting means for inputting query specification information forwhich collectively specifying specifies a plurality of search condition combinations, each of the combinations representing any search query which includes a plurality of search conditions for text information; and

instructing means for instructing a full text search, in which text information specified by the query specification information is searched for based on the specification information.

16. (Amended) A search system, comprising:

obtaining means for obtaining a plurality of search results for a plurality of search condition combinations in a full text search, each of the combinations representing any search query which includes a plurality of search conditions for text information, and text information specified by each of the combinations being searched for in the full text search; and

outputting means for collectively outputting output information corresponding to the plurality of search results.

17.   (New) A search system comprising:

an inputting device inputting multi-dimensional query specification information which specifies a plurality of search condition types, at least one of the search condition types including a plurality of search condition elements, and a plurality of queries specified by combinations of each of the search condition elements in each of the search condition types; and

an instructing device instructing a full text search, in which text information specified by each of the plurality of queries is searched for.

18.   (New) A search system comprising:

an obtaining device obtaining a plurality of search results for a plurality of queries in a full text search, in which text information specified by each of the plurality of queries is searched for, multi-dimensional query specification information specifying a plurality of search condition types, at least one of the search condition types including a plurality of search condition elements, and the plurality of queries specified by combinations of each of the search condition elements in each of the search condition types; and

an outputting device collectively outputting output information corresponding to the plurality of search results.